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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/066,061	04/24/1998	MATTHEW ZAVRACKY	KPN97-04A2	8310

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EXAMINER

NGUYEN, JIMMY H

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 01/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/066,061

Applicant(s)

ZAVRACKY ET AL.

Examiner

Jimmy H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 and 32-36 is/are pending in the application.
- 4a) Of the above claim(s) 1-13, 15 and 18-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14, 16, 17, 25-30 and 32-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 5th, 2001 has been entered. An action on the RCE follows:

2. Claims 1-13, 15 and 18-24 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to non-elected species. Claims 14, 16, 17, 25-30 and 32-36 are considered.

3. It is noted to applicants that claims 1-30 and 32-36, but not only claims 14, 16, 17 and 25-31 as stated by applicants (see page 3, line 8), are pending in the application.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 14, 16, 17, 25-30 and 32-36 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claims above, the specification, page 50, line 29 - page 51, line 21, and the figures 34A-34D do not teach the claimed limitations, "a housing having a volume of less than 330 cm³" and "an array of at least 75,000 pixel electrodes, the array of pixel electrodes having an active area of less than 20 mm²", as recited in independent claim 14, "the housing of the display unit has a volume of approximately 250 cm³", as recited in claim 30, "the array of pixel electrodes has an active area of less than 10 mm²", as recited in claim 33, and "the array of pixel electrodes has an active area of less than 5 mm²", as recited in claim 35, but only teach a housing 604 on page 51, line 2. Therefore, these claims are rejected for the reason as set forth above.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 14, 25, 26, 30 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novis et al. (USPN: 5,867,795, cited in IDS Paper No. 8).

As per claims above, the claimed invention reads on Novis et al. as follows: Novis et al. discloses a portable display system (see figure 1) comprising a housing (11); a liquid crystal display (LCD 20) mounted to the housing and inherently including an array of pixel electrodes (a visual LCD display 20, col. 7, line 10. Also, at the time of the invention was made, it would have been obvious to recognize LCD device including an active matrix LCD device); a lens (lens 44, col. 7, lines 44-46) that magnifies an image on the display; and a card reader (a slot 16) within

the housing that receives video input to be displayed on the display from a smart card or a memory card (a smart card 18, col. 3, lines 46-51) that docks with the card reader (figures 1 and 5, col. 3, lines 25-51 and col. 7, lines 40-66).

Novis et al. discloses all the subject matter claimed with the exception of the particular sizes of the housing, number of pixel electrodes, the active area and the width of pixel electrode and the particular operating frequency of the card reader. However, absent a showing of criticality it would have been within the level of skill in the art and obvious to one having ordinary skill to engineering design the size of of the housing, number of pixel electrodes, the active area and the width of pixel electrode and the particular operating frequency of the card reader, as desired as was judicially recognized in **re Rose, 105 USPO 237 (CCPA 1955) and in re Reven, 156 USPO 679 (CCPA 1968)**.

Therefore, these claims are rejected for the reason as set forth above.

8. Claims 16, 17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novis et al. in view of Michel et al. (USPN: 5,579,165).

In regard to claim 16 as applied to claim 14 above, Novis et al. discloses the visual display including liquid crystal display device, but does not disclose expressly the display including a claimed light emitting diode.

However, Michel et al. discloses a portable display system comprising a LCD device including a LED device (a light emitting diode plate 6, figure 1, col. 22-40, col. 2, lines 28-32) for illuminating the array of pixel electrodes.

It would have been obvious to one of ordinary skill in the art to provide a LCD device of Novis et al. with a LED device of Michel et al. because such LED device would enhance the

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luminance of the screen so as to allow the user viewing the better image. Therefore, it would have been obvious to combine Michel et al. with Novis et al. to obtain the invention as specified in claim above.

In regard to claims 17 and 28 as applied to claim 16 above, Novis et al. in view of Michel et al. discloses the claimed invention except for the particular size of the array of pixel electrodes. Absent a showing of criticality it would have been within the level of skill in the art and obvious to one having ordinary skill to engineering design the size of the array of pixel electrodes as desired as was judicially recognized in **re Rose, 105 USPQ 237 (CCPA 1955) and in re Reven, 156 USPQ 679 (CCPA 1968)**. Therefore, these claims are rejected for the reason as set forth above.

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Novis et al. in view of Yamamoto et al. (USPN: 5,506,705).

In regard to claim 27 as applied to claim 14 above, Novis et al. discloses the visual display including liquid crystal display device, but does not disclose expressly that the LCD display is color sequential.

However, Yamamoto et al. discloses a portable display system such as a goggle type display apparatus comprising a color sequential LCD device (col. 10, lines 47-48).

It would have been obvious to one of ordinary skill in the art to substitute the LCD device of Novis et al. with the color sequential LCD of Yamamoto et al. because this would allow the user to view the image with significantly high realism as taught by Yomamoto et al. (col. 10, lines 63-65). Therefore, it would have been obvious to combine Yomamoto et al. with Novis et al. to obtain the invention as specified in claim above.

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10. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Novis et al. in view of Michel et al. and further in view of Zavracky et al. (USPN: 5,206,749, cited in IDS entered as paper No. 5).

In regard to claim 29 as applied to claim 16 above, Novis et al. in view of Michel et al. discloses the active LCD device, but does not disclose expressly the LCD display comprising an array of transistor circuits formed with single crystal silicon, and the array of transistor circuits being bonded to an optically transmissive substrate with an adhesive layer as claimed.

However, Zavracky et al. discloses a display system in which the LCD display panel comprising an array of transistor circuits formed with single crystal silicon, and the array of transistor circuits being bonded to an optically transmissive substrate with an adhesive layer as recited in claim above (see summary).

It would have been obvious to one of ordinary skill in the art to substitute the LCD panel of Novis et al. for a high quality LCD display panel of Zavracky et al. because such high quality LCD display panel would drive the image with desired speed and would reduce the cost of fabrication as taught by Zavracky et al. (col. 1, lines 53-56). Therefore, it would have been obvious to combine Zavracky et al. and Michel et al. with Novis et al. to obtain the invention as specified in claim above.

Response to Arguments

11. Applicants' arguments filed 11/05/2001, have been fully considered but they are not persuasive because as follows:

In response to Applicant's argument filed with respect to the 35 USC 112, first paragraph rejection, pages 3-4, because the portable display system disclosed in the specification at page

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45, lines 25 through 26 and as shown in figures 27's is different from the portable display system as shown in figures 34's. Therefore, this rejection is maintained.

In response to Applicant's argument filed "Novis does not disclose the number of pixel electrodes in the liquid crystal devices nor the active area of the pixel area of the pixel electrodes ... dependent claims", page 4, line 18 through page 5, line 5, as discussed above, absent a showing of criticality it would have been within the level of skill in the art and obvious to one having ordinary skill to engineering design the size of of the housing, number of pixel electrodes, the active area and the width of pixel electrode and the particular operating frequency of the card reader, as desired as was judicially recognized in re Rose, 105 USPQ 237 (CCPA 1955) and in re Reven, 156 USPQ 679 (CCPA 1968).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is (703) 306-5422. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.

JHN
January 24, 2002



BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600